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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,280	04/28/2005	Jie Lin	CE00558UM	5919

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MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

EXAMINER	
NGUYEN, TUAN HOANG	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/533,280	LIN, JIE	
	Examiner	Art Unit	
	Tuan H. Nguyen	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/28/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 09/15/2003 has been considered by Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-8, 16, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas Howard John et al. (International Publication No. WO 01/31808 hereinafter, "Thomas").

Consider claim 1, Thomas teaches a method of power control for a transmitter in a cellular communication system comprising the steps of: determining power control data in response to a quality parameter of a communication between a base station and a communication unit (page 6 lines 3-10 and lines 22-32), and communicating the power control data between the base station and the communication unit (page 8 lines 3-5); entering a reduced power mode of operation by communicating power down power control data between the base station and the communication unit (page 8 lines 5-12); operating in the reduced power mode by communicating power control data corresponding to a reduced transmit power level (page 8 lines 3-12); and exiting the reduced power mode by communicating power up power control data between the base station and the communication unit (page 8 lines 5-12).

Consider claim 2, Thomas further teaches the power control is an uplink power control and the power control data is transmitted from the base station to the communication unit (page 8 lines 3-12).

Consider claim 3, Thomas further teaches the power control is a downlink power control and the power control data is transmitted from the communication unit to the base station (page 8 lines 5-12).

Consider claim 4, Thomas further teaches the reduced transmit power level is substantially zero (page 10 lines 8-16).

Consider claim 5, Thomas further teaches the power control data communicated in the reduced power mode is power down control values (page 10 lines 22-29).

Consider claim 7, Thomas further teaches the step of exiting comprises transmitting power up power control data until the transmit power corresponds to a power level determined in response to the quality parameter (page 8 lines 3-12).

Consider claim 8, Thomas further teaches the step of exiting comprises transmitting power up power control data until the transmit power corresponds to a power level corresponding to the power level prior to entering the reduced power mode (page 8 lines 3-12).

Consider claim 16, Thomas further teaches the step of determining that a quality characteristic of a data communication between the communication unit and the base station is improving and in response exiting the reduced power mode (page 8 lines 5-12).

Consider claim 24, Thomas teaches for power control for a transmitter in a cellular communication system, the apparatus comprising: means for determining power

control data in response to a quality parameter of a communication between a base station and a communication unit (page 6 lines 3-10 and lines 22-32); means for communicating the power control data between the base station and the communication unit (page 8 lines 5-12); means for entering a reduced power mode of operation by communicating power down power control data between the base station and the communication unit (page 8 lines 5-12); means for operating in the reduced power mode by communicating power control data corresponding to a reduced transmit power level (page 8 lines 3-12); and means for exiting the reduced power mode by communicating power up power control data between the base station and the communication unit (page 8 lines 5-12).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 6, 9, 12-15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Howard John et al. (International Publication No. WO 01/31808 hereinafter, "Thomas") in view of Damnjanovic et al. (U.S PUB. 2003/0050084 hereinafter, "Damnjanovic").

Consider claim 6, Thomas teaches a method of power control for a transmitter in a cellular communication system comprising the steps of: determining power control data in response to a quality parameter of a communication between a base station and a communication unit (page 6 lines 3-10 and lines 22-32), and communicating the power control data between the base station and the communication unit (page 8 lines 3-5); entering a reduced power mode of operation by communicating power down power control data between the base station and the communication unit (page 8 lines 5-12); operating in the reduced power mode by communicating power control data corresponding to a reduced transmit power level (page 8 lines 3-12); and exiting the reduced power mode by communicating power up power control data between the base station and the communication unit (page 8 lines 5-12).

Thomas does not explicitly show that the reduced transmit power level allows a reduced data rate communication between the communication unit and the base station.

In the same field of endeavor, Damnjanovic teaches the reduced transmit power level allows a reduced data rate communication between the communication unit and the base station (page 13 [0116]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the reduced transmit power level allows a reduced data rate communication between the communication unit and the base station, as taught by Damnjanovic, in order to transmit power of a mobile station on the reverse link channel that carries channel state information, rate selection, and/or sector selection

information is power controlled separately from the reverse link traffic channels when the mobile station is in soft handoff.

Consider claim 9, Damnjanovic further teaches a duration of the reduced power mode is less than a data re-transmission interval associated with the communication between the communication unit and the base station (page 8 [0084]).

Consider claim 12, Damnjanovic further teaches the step of determining that an interference level exceeds a threshold and in response entering the reduced power mode (page 13 [0113]).

Consider claim 13, Damnjanovic further teaches the step of determining that a propagation characteristic exceeds a threshold and in response entering the reduced power mode (page 13 [0113]).

Consider claim 14, Damnjanovic further teaches the propagation characteristic is a path loss of a communication link supporting the communication between the communication unit and the base station (page 3 [0036] through [0037]).

Consider claim 15, Damnjanovic further teaches the step of determining that a duration of the reduced power mode exceeds a threshold and in response exiting the

reduced power mode (page 13 [0113]).

Consider claim 17, Damnjanovic further teaches the step of determining that an interference level is below a threshold and in response exiting the reduced power mode (page 7 [0075]).

Consider claim 18, Damnjanovic further teaches the step of determining that a propagation characteristic is below a threshold and in response exiting the reduced power mode (page 13 [0113]).

Consider claim 19, Damnjanovic further teaches the propagation characteristic is a path loss of a communication link supporting the communication between the communication unit and the base station (page 3 [0036] through [0037]).

7. Claims 10-11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Howard John et al. (International Publication No. WO 01/31808 hereinafter, "Thomas") in view of Vembu (U.S PAT. 6,185,432).

Consider claim 10, Thomas teaches a method of power control for a transmitter in a cellular communication system comprising the steps of: determining power control data in response to a quality parameter of a communication between a base station and a communication unit (page 6 lines 3-10 and lines 22-32), and communicating the

power control data between the base station and the communication unit (page 8 lines 3-5); entering a reduced power mode of operation by communicating power down power control data between the base station and the communication unit (page 8 lines 5-12); operating in the reduced power mode by communicating power control data corresponding to a reduced transmit power level (page 8 lines 3-12); and exiting the reduced power mode by communicating power up power control data between the base station and the communication unit (page 8 lines 5-12).

Thomas does not explicitly show that the step of determining that a quality level of the communication between the communication unit and the base station cannot be achieved, and in response entering the reduced power mode.

In the same field of endeavor, Vembu teaches the step of determining that a quality level of the communication between the communication unit and the base station cannot be achieved, and in response entering the reduced power mode (col.2 lines 1-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the step of determining that a quality level of the communication between the communication unit and the base station cannot be achieved, and in response entering the reduced power mode, as taught by Vembu, in order to improve system and method for dynamically selecting a mode of power control for a communication device.

Consider claim 11, Vembu further teaches the step of determining that a transmit power of the transmitter exceeds a threshold and in response entering the reduced power mode (col. 5 lines 12-27).

Consider claim 20, Vembu further teaches the steps of: determining an expected interference level for a plurality of communication units including the communication unit (col. 1 lines 36-44); determining a total expected interference level (col. 1 lines 36-44); and entering the communication unit into the reduced power mode if the total expected interference level exceeds a threshold (col. 5 lines 12-27).

Conclusion

8. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

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Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen
Examiner
Art Unit 2618

NAY MAUNG
SUPERVISORY PATENT EXAMINER